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Posttraumatic stress disorder in a psychosomatic outpatient clinic Gender effects, psychosocial functioning, sense of coherence, and service utilization

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Abstract

Background: The lifetime prevalence of DSM-IV traumatic events and posttraumatic stress disorder (PTSD) was assessed in outpatients of a tertiary referral mental health center; differences in psychopathology and service utilization between PTSD and non-PTSD patients were evaluated. **Methods:** Five hundred eighty-three outpatients (35.3 years, S.D.=12.5; 74.3% women and 25.7% men), who had been initially examined by clinically experienced medical and psychological psychotherapists, were investigated by means of standardized trauma-specific questionnaires. **Results:** Of the patients, 61.1% reported at least one traumatic event during their lifetime, but only 34.3% of the total sample met the DSM-IV (A1 and A2) criteria. The lifetime prevalence of PTSD-positive screening was 10.1%. In 2.7% of these patients, PTSD had been diagnosed in clinical routine (ICD-10: F43.1); 6.6% of the men and 11.3% of the women met the diagnostic criteria for lifetime prevalence of PTSD. All in all, patients with PTSD had higher levels of depression and anxiety and lower levels of sense of coherence ($P<.001$) than did patients without PTSD (all $P<.001$). In addition, PTSD patients reported significantly higher rates of medical consultations ($P<.001$), psychotropic medication ($P<.001$), and psychotherapy ($P<.001$). **Conclusions:** About one third of the outpatients suffered from DSM-IV traumas, and 10%, from PTSD. However, PTSD had been diagnosed only in very few patients within the routine diagnostic procedure. These findings suggest that PTSD is frequently overlooked not only in primary but also in tertiary care settings. Finally, our study supports previous results that PTSD patients use more service utilization and are more affected by psychopathology symptoms.
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Keywords: Trauma; Posttraumatic stress disorder; Service utilization; Mental health

Introduction

According to DSM-IV, posttraumatic stress disorder (PTSD) is an anxiety disorder that develops after a severe traumatic event or experience. Characteristic symptoms include intrusive recollections, such as flashbacks and nightmares, avoidance behavior, emotional numbing, and symptoms of increased arousal [1]. With lifetime prevalence rates of 8% to 9% in the U.S. general population [2,3], PTSD has been identified as a notable mental health problem by a number of epidemiological studies [4–10]. In adolescents, German epidemiological studies report lower prevalences of PTSD, with a percentage of 1% to 2% [11,12]. There is a wide range of prevalence rates of PTSD in at-risk individuals (e.g., victims of violence) ranging from 15% to 90% [13–17]. Similar ranges of prevalence of PTSD have been described in psychiatric patients, ranging from 28% [18] to 42% [19]. Kessler et al. [2] found a higher prevalence of PTSD in women (10.4%) than in men (6%) in the United States. There are also gender differences with regard to types of traumatic events. Whereas for men, combat exposure and witnessing someone being injured or killed are the most common traumatic experiences associated with PTSD, rape, sexual molestation, and physical abuse during childhood are among the most frequent causes of PTSD in women.

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Although a history of trauma is common, the diagnosis of PTSD is often underdiagnosed in clinical practice [20–22]. Mueser et al. [23] found that more than 43% of their psychiatric patients fulfilled the criteria for PTSD, but only 2% had this diagnosis in their charts. Dansky et al. [24] noted similar rates of missing diagnoses in a population of patients with substance abuse. These studies confirm that PTSD is common but seldom diagnosed in patients who have experienced traumatic events. Instead, clinicians commonly diagnose a variety of diseases known to be comorbid with PTSD [17,19–22].

PTSD has been strongly associated with a decrease in well-being, decreased health and quality of life, poor psychological adjustment, and low sense of coherence [6,25–27]. Studies of the impact of traumatic events and PTSD on psychosocial functioning provide compelling evidence of a considerable psychiatric comorbidity and impairment in a variety of domains, including somatization [28], depressive and anxiety symptoms [29,30], behavioral problems [31], affect dysregulation [32], and social interaction problems [5].

Epidemiological studies have furthermore documented that only a minority of individuals with diagnosable mental disorders receive adequate psychiatric treatment [33–35]. Although several previous studies examined service utilization in individuals exposed to traumatic experiences, such as sexual assault [36], these studies did not particularly evaluate the service utilization of individuals suffering from PTSD. The few studies focusing on treatment-seeking subjects consisted of Vietnam veterans or clinical samples. The results of these studies have been inconsistent with regard to the utilization of psychotherapeutic or psychosocial support [19,21].

The purpose of our present study was (1) to estimate the lifetime prevalence of traumatic events and PTSD overall, as well as with regard to gender in outpatients of a tertiary psychosomatic outpatient clinic; (2) to compare the validity of PTSD diagnosis in clinical practice and psychometric testing; (3) to examine the relationship between the experience of a trauma or PTSD and depression, anxiety, and sense of coherence; and last, (4) to assess the relationship between trauma, PTSD, and health care service utilization.

Methods

Design and procedure

Between the years 2001 and 2003, over 6400 outpatients were consecutively in ambulant treatment at the large Clinic of Psychosomatic Medicine and Psychotherapy of the University Clinic of Duisburg-Essen. It is open to patients of all social and vocational levels. The psychosomatic outpatient clinic is typically chosen in Germany for cases with comorbidity of psychological and physiological symptoms. Patients were predominantly citizens of the city of Essen (population 598,968) or neighboring cities of the Ruhr area (general population 5.4 million people) and, as a rule, had been referred by their general practitioners. While they were waiting to see their clinicians in the clinic, 704 outpatients were requested to take part in the study, 628 (88.4%) of these participated. Forty patients had to be excluded from the study because of too many missing data in their questionnaires; hence, that a total of 583 (82.8%) patients were then included in the study. Included and excluded patients did not differ in sociodemographic variables.

The patients we then included in our study were initially examined to diagnose their psychiatric or psychosomatic symptoms. Prior to the initial investigation, they were issued a questionnaire. The clinical routine diagnostics consisted of a clinical psychiatric interview with a timeframe of 60 to 100 min. Psychiatric disorders were diagnosed according to the criteria of ICD-10 [37]. The clinicians investigating the patients solely had the information that these patients were to be included in a study without knowing the explicit context or goal of the study. Patients suffering from dependent disorders, psychosis, dementia, or insufficient knowledge of the German language were excluded from the study.

Instruments

The *Posttraumatic Stress Diagnostic Scale* (PDS; [38]) is a 49-item self-report instrument designed to aid in the diagnosis of PTSD. The structure and content of the PDS mirror the DSM-IV diagnostic criteria [38] for PTSD. We used the German translation of the English version [39]. We used two sections of the PDS for evaluating the trauma diagnostic criteria for PTSD according to DSM-IV [1]. By means of a checklist, Participants are asked to report all traumatic events that they witnessed or experienced in the past; they are asked to indicate which event disturbed them the most in the past month, to briefly describe the event in a space provided, and to refer to this event when completing the subsequent sections (Part 1). Criterion A1 is assessed by four yes/no questions inquiring about physical injury towards themselves or someone else. Criterion A2 assesses helpless feelings, anxiety and horror, and how the individual feels at the time of the event.

Posttraumatic psychological symptoms were assessed using the German version of the *Impact of Event Scale-Revised* (IES-R; [40]), a 22-item self-rating questionnaire comprising three subscales (intrusion, avoidance, and hyperarousal). The IES-R is among the most frequently used research instruments in traumatic research [40]. This questionnaire has been widely validated and found to be a highly reliable instrument [40]. Additionally, Maercker and Schützwohl [41] suggest a logistic equation for the German version, which allows *discrimination* between positively and negatively screened participants for PTSD. Participants with a positive screening score met the criteria for a PTSD.

In the German revised version, alpha was .90 for intrusion, .79 for avoidance, and .90 for arousal.

For the purpose of our study, a screening diagnosis of PTSD was fulfilled if both the DSM-IV [1] criterion A for PTSD and a positive screening score according to the IES-R were met.

The German version of the *Hospital Anxiety and Depression Scale* (HADS; [42]) is a 14-item self-report questionnaire with good validity and reliability (α=.80 for anxiety, and .81 for depression). Seven items refer to depression (HADS-D) and another seven items to anxiety (HADS-A). Participants are asked to rate each item on a four-point Likert scale ranging from 0 to 3. A score of 11 or more on either of the scales indicates that an anxiety disorder or depression is likely [42].

The *Sense of Coherence Scale* (SOC) was developed by Aaron Antonovsky [43]. The concept of SOC consists of three different working models, namely, comprehensibility, manageability, and meaningfulness. According to this model, SOC is linked to health in various ways, including the perception of stressors as challenges rather than burdens, and the ability to select appropriate health behavior to meet these challenges. Antonovsky contended that, in a given culture and social situation, strong-SOC persons facing a major life event will select the optimal pattern of resources or coping patterns for their life situation. The short version includes 13 of these items. The SOC score represents the sum of the ratings across all items so that a high score indicates a strong SOC. In the German version, alpha was .85 for SOC-13 [44]. Several studies show an inverse relationship between sense of coherence and variables of psychopathology [27,43–45].

Service utilization

Service utilization was studied by three self-made items. Patients were asked about their number of medical consultations within the past 12 months. They were also asked about their utilization of psychotherapeutic/psychiatric mental health care, as well as the use of psychotropics during their lifetime.

Three groups were compared: (1) *no trauma* (participants not reporting any trauma), (2) *trauma only* (patients who experienced at least one trauma according to the PDS but did not meet a positive score of IES-R), and (3) *PTSD* [patients who met both the DSM-IV [1] (A1 & A2) criteria and a positive score of IES-R].

Statistical analysis

Descriptive and inference statistical analyses were performed using SPSS for Windows Version 11.0 [46]. Comparisons between groups were performed using one-way ANOVA with Bonferroni post hoc comparisons, *t* tests, Kruskal–Wallis nonparametric test, and χ^2 test (or Fisher's Exact Tests, as appropriate). Odds ratios (Ors) and 95% confidence intervals (CIs), generated from contingency tables, were used to estimate the trauma/PTSD lifetime prevalences between men and women. Differences were considered significant at an α level of 5%.

Results

Demographic characteristics

The demographic characteristics of the patients in the sample are shown in Table 1. The sample consisted of 583 outpatients of a psychosomatic clinic, 150 men and 433 women [χ^2=137.3 (1), P<.001], who ranged in age from 17 to 84 years. The mean age of all patients was 35.3 years (S.D.=12.5). Men were significantly older than women (T=4.7, P<.001); 296 patients were single, 180 were married. There were no differences in employment patterns and in religion between men and women.

The most common ICD-10 diagnoses were eating disorders (34.5%), depression (20.6%), anxiety disorders (17.0%), and somatoform disorders (13.7%).

Prevalence of trauma and PTSD (total/gender)

One of the central goals of our study was to investigate the prevalence of traumatic experiences and PTSD in

Table 1
Sociodemographic characteristics

Sociodemographic characteristics	Total N=583	Men, 150 (25.7%)	Women, 433 (74.3%)	P value
Age, years (±S.D.)	35.3 (12.5)	39.5 (12.7)	33.9 (12.1)	.000
Marital status	N (%)	n (%)	n (%)	.028
Single	296 (50.8)	62 (41.3)	234 (54.0)	
Married	180 (30.9)	61 (40.7)	119 (27.5)	
Separated/Divorced	90 (15.4)	24 (16.0)	66 (15.2)	
Widowed	8 (1.4)	2 (1.3)	6 (1.4)	
Religious group				.200
Catholic	242 (45.4)	55 (41.0)	187 (46.9)	
Protestant	223 (41.8)	54 (40.3)	169 (42.4)	
Muslim	18 (3.4)	7 (5.2)	11 (2.8)	
Other	7 (1.3)	3 (2.2)	4 (1.0)	
None	43 (8.1)	15 (11.2)	28 (7.0)	
Education				.003
Other	38 (6.6)	8 (5.4)	30 (7.0)	
Secondary general school certificate	175 (30.4)	55 (37.4)	120 (28.0)	
Intermediate school certificate	175 (30.4)	28 (19.0)	147 (34.3)	
University entrance diploma	187 (32.5)	56 (38.1)	131 (30.6)	
Employment status				.720
Paid work (full or part time)	254 (44.6)	72 (48.6)	182 (43.1)	
Unemployed, student	195 (34.2)	48 (32.4)	147 (34.8)	
Sick leave	89 (15.6)	22 (19.4)	67 (15.9)	
Retired	13 (2.3)	3 (2.0)	10 (2.4)	

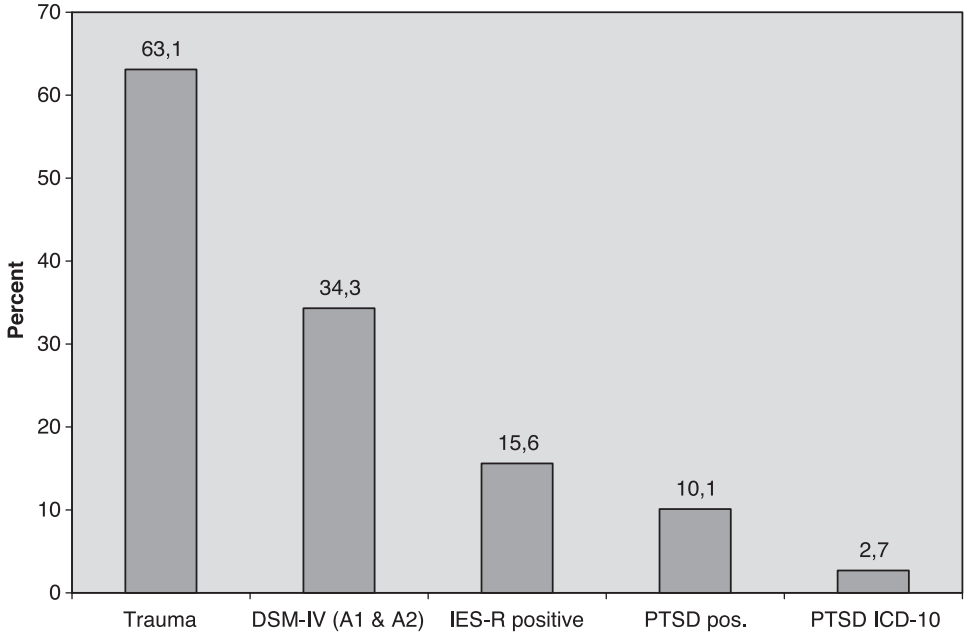

Fig. 1. Prevalence of trauma and PTSD according to the different diagnostic procedures (N=583).

patients referred to a tertiary *psychosomatic clinic* by general practitioners. Three hundred sixty-eight patients (63.1%) of the total sample ($N=583$) reported at least one traumatic event in their lifetime (Fig. 1). Of those patients, who reported traumatic experiences, 118 (31.5%) reported one event, 83 (22.2%) two, and 173 (46.3%) reported three or more events. However, only 200 (34.3%) of the total sample fulfilled both trauma criteria (A1 and A2) according to DSM-IV [39]. Ninety-one (15.6%) patients met an IES-R positive score with regard to PTSD, according to the definition of Maercker and Schützwohl [41]. On the whole, 59 patients (10.1%) met test-psychometrically the criteria for PTSD (lifetime). In contrast to these results, clinicians examining the patients in their daily routine diagnosed PTSD in only 16 patients (2.7%). Patients with traumatic experiences and suffering from PTSD ($n=59$) reported, on average, 3.4 traumas, whereas patients with traumatic experiences, without suffering from PTSD, reported only 2.3 traumas on average ($T=-4.8$; $P<.001$).

No significant differences between men and women on the prevalence of trauma could be observed according to our diagnostic procedure (DSM-IV [1] trauma criteria A1 and A2, IES-R, PTSD positive screening, ICD-10). Nevertheless, men were less likely to have experienced traumas and to suffer from PTSD than women do; however, this difference did not reach statistical significance (Table 2).

Types of trauma (total/by gender)

With regard to the total sample of 583 patients (Table 3), the most commonly reported single traumatic event were serious accidents (21.5%), child abuse (21.3%), a life threatening illness (19.4%), and nonsexual assault through someone acquaint (16.8%). The category "other event" was endorsed most frequently (26.7%). This category included events such as receiving news of the sudden death or injury of someone close, severe operations, and suicide attempts. Traumas with low frequencies were combat (1.2%), torture (1.2%), and imprisonment (2.1%).

Women were significantly more likely than men to report sexual assault, either through a stranger or someone they knew, as well as abuse during childhood. Women reported on sexual assault through someone they knew six times more frequently (OR=6.4, 95% CI=2.5–16.2; $P<.001$), and three times more often through a stranger than was the case for men (OR=3.0, 95% CI=1.4–6.2; $P<.01$). Furthermore, they were more than twice as likely as men to have been the victim of child abuse (OR=2.1, 95% CI=1.2–3.6; $P<.01$). Men, however, were significantly more likely to have been the victim of physical assault through a stranger (19.6% vs. 12.4%; $P<.05$). There were no significant gender differ-

Table 2
Prevalence of traumas and PTSD according to gender

	Men, *n* (%)	Women, *n* (%)	Odds ratio (95% CI)[a]
Any trauma	95 (63.3)	279 (64.4)	1.1 (0.7–1.7)[n.s.]
DSM-IV criteria (A1 and A2)	44 (29.3)	156 (36.0)	1.3 (0.8–2.3)[n.s.]
IES-R positive	16 (10.6)	75 (17.3)	1.8 (0.9–3.5)[n.s.]
PTSD-positive screening	10 (6.6)	49 (11.3)	1.6 (0.7–3.3)[n.s.]
PTSD ICD-10	6 (4.0)	10 (2.3)	0.5 (0.2–1.5)[n.s.]

n.s.=Nonsignificant.
[a] CI=confidence interval.

Table 3
Types of traumatic events according to gender

Traumas	Total *N* (%)	Men, *n* (%)	Women, *n* (%)	Odds ratio (95% CI)[a]
Nonsexual assault/someone you know	95 (16.8)	15 (10.3)	80 (19.0)	2.0 (1.1–3.6)*
Nonsexual assault/ stranger	81 (14.3)	29 (19.6)	52 (12.4)	0.5 (0.3–0.9)*
Sexual assault/ someone you know	83 (14.7)	5 (3.4)	78 (18.6)	6.4 (2.5–16.2)***
Sexual assault/ stranger	71 (12.7)	8 (5.5)	63 (15.1)	3.0 (1.4–6.5)**
Child abuse	119 (21.3)	19 (13.0)	100 (24.2)	2.1 (1.2–3.6)**
Serious accident	123 (21.5)	36 (24.5)	87 (20.5)	0.7 (0.5–1.2)
Life-threatening illness	109 (19.4)	33 (22.6)	76 (18.3)	0.7 (0.4–1.2)
Natural disaster	13 (2.3)	2 (1.4)	11 (2.6)	1.9 (0.4–8.8)
Imprisonment	12 (2.1)	9 (6.1)	3 (0.7)	0.1 (0.0–0.4)
Combat	7 (1.2)	5 (3.4)	2 (0.5)	0.1 (0.0–0.7)
Torture	7 (1.2)	3 (2.0)	4 (1.0)	0.4 (0.1–2.1)
Other traumatic event	149 (26.7)	37 (25.3)	112 (26.7)	1.1 (0.7–1.6)

[a] CI = confidence interval.
* $P<.05$, two tailed.
** $P<.01$, two tailed.
*** $P<.001$, two tailed.

ences in the prevalence of a serious accident, life-threatening illness, and other traumatic events.

Psychosocial functioning and PTSD

ANOVA revealed significant differences across the three groups with regard to depression ($F=10.5$; $P<.001$), anxiety ($F=5.5$; $P<.01$), and sense of coherence ($F=24.0$; $P<.001$). Post hoc tests (Bonferroni) showed highest levels in depression and anxiety in PTSD-positive-screened patients (Table 4). Patients suffering from PTSD had a mean sense of coherence score of 3.0 (S.D. = 0.95), whereas the "trauma-only" and the "no-trauma" subsamples had mean scores of 3.8 (S.D. = 1.2) and 4.3 (S.D. = 1.2), respectively. The no-trauma group had the lowest scores on depression ($M=9.4\pm4.0$) and anxiety ($M=9.2\pm3.1$). No significant difference could be observed between the no-trauma and the trauma-only patients with regard to depression ($M=9.4\pm4.0$ vs. 10.1 ± 4.0; n.s.) and anxiety ($M=9.2\pm3.1$ vs. 9.5 ± 3.2; n.s.).

Table 4
Psychosocial functioning and age according to groups

	No trauma, *M* (S.D.)	Trauma only, *M* (S.D.)	PTSD, *M* (S.D.)	*F* value	Group differences[a]
Depression (HADS-D)	9.4 (4.0)	10.1 (4.0)	12.1 (4.2)	10.5***	P>N***, T**
Anxiety (HADS-A)	9.2 (3.1)	9.5 (3.2)	10.8 (3.1)	5.5**	P>N**, T*
Sense of coherence (SOC)	4.3 (1.2)	3.8 (1.2)	3.0 (0.9)	24.0***	P<N***, T*** N>T***
Age in years	36.4 (13.3)	35.1 (12.4)	32.6 (9.1)	2.2[n.s.]	None

Groups: N = no trauma ($n=212$); T = trauma only ($n=312$); P = PTSD ($n=59$).
[a] Pairs of groups that differ significantly ($P<.05$) using Bonferroni post hoc tests.
* $P<.05$, two tailed.
** $P<.01$, two tailed.
*** $P<.001$, two tailed.

Table 5
Services utilized by groups

	No trauma	Trauma only	PTSD	χ^2	Group differences[a]
Medical consultation	5–8[b]	5–8[b]	9–12[c]	.004	P>N***, T**
Psychotherapy	46%	60%	71%	.000	P>N*** T>N**
Psychotropic medication	51%	61%	83%	.000	P>N***, T** T>N*

Groups: N = no trauma ($n=212$); T = trauma only ($n=312$); P = PTSD ($n=59$).
[a] Pairs of groups that differ significantly ($P<.05$) using U tests.
[b] Corresponds to an actual range of 5–8 medical consultations per year.
[c] Corresponds to an actual range of 9–12 medical consultations per year.
* $P<.05$, two tailed.
** $P<.01$, two tailed.
*** $P<.001$, two tailed.

Health service utilization and PTSD

Table 5 presents service utilization in the three different subsamples. One-way Kruskal–Wallis tests revealed an overall difference between the groups ($P<.01$). Patients suffering from PTSD were most likely to have consulted a doctor (9 to 12 visits per year), were most commonly treated by a psychotherapist (71%), and used most frequently psychotropic medication (83%). The number of medical consultations of PTSD patients ranged from 9 to 12 visits per year, whereas the number of medical consultations of the two groups without PTSD ranged from five to eight per year. The frequency of psychotherapy utilization and psychotropic medication was lowest in the no-trauma patients (46% and 51%). No-trauma and trauma patients without PTSD did not differ in the frequency of medical consultations ($Z=-1.2$; $P<.204$); however, both psychotherapeutic ($Z=-3.1$; $P<.01$) and psychopharmacologic treatment ($Z=-2.3$; $P<.05$) were more frequent in trauma-only patients.

Discussion

Of the patients, 63.1% reported at least one traumatic event during their lifetime according to the PDS trauma checklist. Only 34.3% of patients reported at least one traumatic event of sufficient severity to meet the stressor criteria according to DSM-IV [1]. Interestingly, the lifetime prevalence of PTSD in our tertiary referred patients was

10.1%, a rate not decisively higher than the 7.8% [2] and 9.2% [3] observed by two U.S. epidemiological studies (based on DSM-III-R and DSM-IV criteria [1], respectively). Considerably lower prevalence estimates in the general population were found in the Epidemiological Catchment Area (ECA) study using DSM-III criteria [5,47], ranging from 1% to 1.3%. Perkonigg et al. [12] found, in Germany, a PTSD prevalence of 1% of males and 2.2% of females. However, that study focused on young adolescents and young adults (age 14–24). Essau et al. [11] assessed the frequency and comorbidity of PTSD in 1035 adolescents between the ages of 12 and 17 years. A total of 1.6% adolescents met the DSM-IV criteria for PTSD at some point in their life. In contrast to these two German epidemiological studies, we assessed a demographic group *with a broader age range* at higher risk of experiencing traumatic events compared with the broader range of adults (age 17–84). Compared with studies on tertiary referred patients, our prevalence rate of PTSD was much lower than in previous U.S. clinical studies indicating prevalence rates of PTSD up to 43% both in psychiatric in- and outpatients [20,23,48,49].

Multiple factors may be involved for the different prevalence of PTSD, including differences in diagnostic criteria, assessment procedures, and the sample characteristics. One reason for the wide range of prevalence estimates may be the different definition of traumatic events, especially with regard to Criterion A of DSM-IV [1]. Some authors included mother's illness and death as qualifying events [5], others, a miscarriage [47], a husband's illness and death or a wife's seizures [49]. This phenomenon may also reflect different social, cultural, and ethical aspects of the society that the study was carried out in: Exposure to torture, for example, is much less frequent in Germany; however, the probability of being a victim of sexual or physical assault is much higher. Our differentiated evaluation of the prevalence of trauma or PTSD demonstrates that not every trauma on the PDS trauma checklist equates to a psychic trauma according to DSM-IV [1]. Numerous studies do not clearly demonstrate as to whether the individual trauma complies to the DSM criteria of a psychic trauma [19,20,23]. We were able to demonstrate that solely one third (34.1%) of our sample comply to the initial trauma criteria according to DSM-IV [1]. We were also able to demonstrate that a psychic trauma according to DSM-IV [39] did not necessarily lead to PTSD in each case. In the present study, more than 10% of the patients satisfied the trauma criteria according to DSM-IV [1], as well as to a positive score on the German version of the Impact of Event Scale.

Our assumption was that PTSD was seldom diagnosed in routine clinical practice, even by experienced medical or psychological clinicians. Chart diagnoses demonstrated that PTSD had been diagnosed in only 16 patients (2.7%) out of a total sample of 583 patients. This result is consistent with other studies [22,23,49,50]. For instance, Escalona et al. [48] found out that 84% of their psychiatric inpatients had suffered at least one traumatic event, and many had symptoms of PTSD, but only 1.7% had been previously diagnosed with PTSD in this population.

There are several explanations for the considerably lower rate of PTSD diagnoses as a result of psychiatric interviews in clinical routine compared with our elaborated psychometric testing: PTSD, as a new diagnosis, may still be little known among clinicians and even less among patients. Comorbid symptoms rather than specific PTSD symptomatology are reported by the patients, leading to various psychiatric disorders but not PTSD [17,19,22].

Patients suffering from PTSD reported significantly more traumas than did patients without. This result is in line with previous studies identifying the number of traumatic events as a powerful predictor of PTSD development [12,23,47,51].

Sixty-three percent of the men and 67% of the women had experienced at least one traumatic event in their lifetime. On average, more than 6% of the men and 11% of the women who had experienced traumatic events met the diagnostic criteria for lifetime PTSD. Our results, although not significant, are in line with other studies demonstrating women to be more affected by PTSD than men are [2,31,52,53]. Gender differences can also be observed with regard to the specific kind of trauma. Whereas sexual and nonsexual assault through someone known was frequently reported by women, nonsexual assault through a stranger was identified exclusively by men.

Another important finding was that PTSD was strongly associated with a variety of difficulties in psychiatric symptoms. Overall, patients with PTSD had significantly more severe depressive and anxiety symptoms than did patients without. Statistical significance does not necessarily imply *clinical* relevance of a difference. However, according to the cutoff scores of HADS, the depression mean score for the no-trauma and the trauma groups without PTSD were borderline, whereas the same score for the PTSD group was clinically relevant. The same tendency was observed for the anxiety score in the three groups. Thus, on the basis of this difference, we consider that the majority of statistical significant differences that have been observed can be considered *clinically* relevant. Similarly to other studies [28,45], patients not suffering from PTSD had a higher level of sense of coherence.

Consistent with previous research [21,54–56], we found that patients with PTSD reported more service utilization than did patients without PTSD.

There are several limitations of this study that require consideration: Patients were consecutively drawn from a large psychosomatic outpatient clinic that is a tertiary referral center and may not be representative of the general population. Another possible limitation is that PTSD was assessed by means of two standardized self-report instruments (PDS and IES-R) instead of a standardized diagnostic interview. However, several studies [40,41,57] demonstrated that these instruments show satisfactory to good agreement with standardized psychiatric interviews.

In contrast to our results, most clinical studies report much higher rates of trauma and PTSD prevalences [20,23,48,49]. Finally, the data are cross-sectional and do not allow us to suggest any causal relationship. Distressing events were retrospectively assessed, therefore, recollection biases are probable.

PTSD is a disorder that is relatively common but frequently not diagnosed. The presentation of PTSD includes psychological, psychiatric, behavioral, and somatic symptoms. Patients with PTSD tend to have a high incidence of comorbidity, particularly of depressive, anxiety, and somatoform disorders. Our data, however, may have important implications for the treatment and management of PTSD, the major implication of our findings being that clinicians must be alert to the symptoms of PTSD in patients who have suffered either past or recent trauma or patients who have comorbid disorders to offer appropriate treatment options. Despite the apparent prevalence of PTSD in our sample, it was rarely diagnosed by experienced clinicians. In summary, our results suggest that PTSD is highly unrecognized in routine clinical practice, is associated with a variety of difficulties in psychosocial functioning, and that patients with PTSD have a high service utilisation. It will be important to *determine if the early detection of PTSD in psychosomatic settings will improve outcomes.*

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